## EXHIBIT 10

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1
                     UNITED STATES DISTRICT COURT
                    SOUTHERN DISTRICT OF NEW YORK
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     AXIOM INVESTMENT ADVISORS, LLC,
     by and through its Trustee, Gildor )
Management, LLC, and AXIOM )
 5
     INVESTMENT COMPANY, LLC, by and
     through its Trustee, Gildor
 6
     Management, LLC,
 7
                               Plaintiffs,
 8
                                               Case No.
                                               15 Civ. 9945 (LGS)
     ٧.
 9
     DEUTSCHE BANK AG,
10
                                Defendant.
11
12
13
14
                  VIDEOTAPED DEPOSITION OF ROEL OOMEN
15
                                  VOLUME I
16
                         Friday, November 3, 2017
17
                                    9:11 a.m.
                               AT:
18
19
                                 Taken at:
20
                            Kirkland & Ellis LLP
                               30 St Mary Axe
21
                              London EC3A 8AF
                               UNITED KINGDOM
22
23
24
     Court Reporter:
25
     Rose Kay
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4	0 D		
1	Q. Do you recall at least one?	1	A. The Kevin Sheppard I know, presumably. He is
2	MR. GENSER: Same objection.	2	an Oxford academic.
3	A. I recall the conversation that I highlighted,	3	Q. And did you and he write an article where you
4	yes.	4	referenced the 4 p.m. FX currency fix?
5	BY MS. LAWRENCE:	5	A. Yes.
6	Q. Are you familiar with FX Direct Dealer LLC,	6	Q. So you are familiar with the 4 p.m. FX
7	often referred to as "FXDD"?	7	currency fix; correct?
8	A. I believe they are a client of ours, yes.	8	A. Yes.
9	Q. And what is FXDD?	9	Q. And are you aware that there are cases and
10	A. I believe, but I am not certain, that they are	10	settlements concerning that?
11	a retail broker.	11	MR. GENSER: Object to form and objection,
12	Q. Do you recall FXDD ever being fined for its	12	relevance.
13	any of its processes involving last look?	13	A. Yes, I read the news. I have come across it.
14	MR. GENSER: Objection, form.	14	BY MS. LAWRENCE:
15	A. I don't recall.	15	Q. And are you familiar with, in particular, the
16	BY MS. LAWRENCE:	16	cases and settlements concerning Deutsche Bank and the FX
17	Q. Outside of the last look context, are you	17	currency fix?
18	aware of any other investigations, cases or settlements	18	MR. GENSER: Object to form, relevance.
19	concerning FX trading against Deutsche Bank?	19	A. I don't believe so.
20	MR. GENSER: Object to form; and I also object	20	BY MS. LAWRENCE:
21	potentially on the grounds of attorney-client privilege and	21	Q. Shifting gears a little bit. Can you please
22	work product. To the extent that your answer would be based	22	explain to me your highest level of education that you have
23	on, or reveal, attorney-client communications, I instruct	23	completed?
24	you not to answer the question. If you can answer without	24	A. I have a PhD in economics.
25	revealing those communications, then you can answer.	25	Q. And where is that from, please?
	37		39
	O1		
1		1	
1	A. Sorry, can you repeat the question one more	1	A. From the European University Institute.
2	A. Sorry, can you repeat the question one more time?	2	A. From the European University Institute.  Q. Where is that located?
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1	bank, your employer, would give for a definition?	1	A. Ah, well
2	MR. GENSER: Objection, lack of foundation. And	2	MR. GENSER: Objection hold on. What is the
3	I will note: Mr. Oomen is not here as a 30(b)(6) witness.	3	question? Your last statement was: "We are not talking
4	You have had your opportunity to question the bank's	4	about the slide." It is not a question. So do you have
5	30(b)(6) witness on the topic of last look. So let's not	5	a question?
6	try to turn this into a 30(b)(6) deposition, which it is	6	MS. LAWRENCE: Can you read back the last
7	not.	7	question, please?
8	A. Firstly, I should say: you call it	8	(Record read.)
9	a "definition". I would call it an informal description	9	MR. GENSER: Objection, vague. Misstates the
10	on my behalf.	10	testimonv.
11	I don't think the way I described "latency buffer"	11	A. Sorry, maybe I should just summarize the
	is materially inconsistent with how Deutsche Bank would view		
12	•	12 13	argument we have had. You are asking me about a specific
13	this process.		quote, and I gave two examples of activities that I would
14	BY MS. LAWRENCE:	14	judge to be part of the latency arms race.
15	Q. Okay. Turning back to slide 22. Do you see	15	The context in which I gave these examples are
16	the last line says:	16	traders trying to execute trades on the venues that are
17	"It halts the latency arms race and similar	17	listed in this quote here.
18	concepts have recently been deployed"	18	Your question seems to depart from this entire
19	Then it lists four entities. Do you see that?	19	context and ask something unrelated.
20	A. Yes.	20	BY MS. LAWRENCE:
21	Q. Specifically what do you mean by a "latency	21	Q. Okay. So don't look at the slide; okay? I am
22	arms race"?	22	asking you if I said: what do you understand the term
23	A. The the development where market	23	"latency arms race" to mean, what would your answer be?
24	participants are investing time, effort and resources into	24	MR. GENSER: Objection, asked and answered.
25	trading in ways that are latency-sensitive.	25	A. Market participants investing in technology
	77		79
1	Q. And what are some of those ways?	1	that allows for well, that allows for latency-sensitive
<b>1</b> 2	MR. GENSER: Objection, vague.	1 2	that allows for well, that allows for latency-sensitive trading.
			trading. BY MS. LAWRENCE:
2	MR. GENSER: Objection, vague.	2	trading. BY MS. LAWRENCE: Q. And one way to get around that investment is
2	MR. GENSER: Objection, vague.  A. Co-locations, microwave networks. Those are two examples.  BY MS. LAWRENCE:	2	trading.  BY MS. LAWRENCE:  Q. And one way to get around that investment is to employ a latency buffer; correct?
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MR. GENSER: Mr. Oomen, do you need some water or a number of other checks have been completed, like a credit 1 check, quote integrity, liquidity check, system 2 anything? 3 A. Yes, can I have some water? Thank you. availability, and so on, impose a short delay; after which A price quote -- I wouldn't use the term "price it will make an accept or reject recommendation, on the 4 quote" because a quote consists of a number of attributes, basis of where the most up to date client price is, compared and one of them is price. But other ones are quote ID, to the price that the client originally sent the request 6 amount, currency pair; a number of factors. So a quote is 7 7 8 a quote and a price would be part of a quote. BY MS. LAWRENCE: BY MS. LAWRENCE: 9 9 Q. So after the trade instructions, you said Q. So are you sending quotes or prices? a series of checks occurs; correct? 10 10 A. We send quotes, indicative quotes. 11 MR. GENSER: Objection, misstates the testimony. 11 A. After the receipt of the trade instruction, 12 Q. So in this DTA model, Deutsche Bank compares 12 the price in the client trade request to the most recent yes, a number of checks occurs. 13 13 updated client stream price? 14 14 BY MS. LAWRENCE: 15 MR. GENSER: Objection, vague with respect to 15 Q. And that occurs before any DTA is applied; "this DTA model". 16 16 correct? 17 17 A. Yes, I don't -- so as I said, I don't MR. GENSER: Objection, vague. recognize this document. I haven't authored it. So when 18 18 BY MS. LAWRENCE: 19 you say: "Within this model, what does Deutsche Bank do?" 19 Q. Irrespective of a DTA? I wonder if you can rephrase the question. A. I believe there are parallel processes. 20 20 21 BY MS. LAWRENCE: 21 BY MS. LAWRENCE: 22 Q. Okay. So this document aside, in 22 Q. Are there any other price comparisons done Deutsche Bank's DTA methodology, does Deutsche Bank compare 23 23 outside of the DTA acceptance --24 the price in the client trade request to the most recent 24 MR. GENSER: Objection, vague. 25 updated client stream prices? 25 BY MS. LAWRENCE: 149 151 MR. GENSER: Objection, vague. O. -- module? 1 1 A. Outside of the? 2 A. Yes. There will be a scenario where it might 2 3 do that. But it doesn't necessarily need to do that. 3 Q. DTA acceptance module. MR. GENSER: Objection, vague. 4 BY MS. LAWRENCE: 4 5 A. Yes. So if delayed trade acceptance is not 5 Q. So you are familiar with the DTA module at configured, then we will obviously still check if the trade 6 Deutsche Bank; correct? 6 A. So as I mentioned, at a high level I am 7 requests that are coming in are on-market. 7 8 familiar with it, yes. 8 BY MS. LAWRENCE: 9 9 Q. How do you check that? Q. Okay. 10 Can you explain, for the record, how it works, 10 A. So there are a number of checks. from your high level understanding? We check whether the client is sending a request, 11 11 12 A. So the trading protocol we have with clients based on a valid quote ID, so checking basically whether he 12 13 is where we send indicative quotes to our clients. And they 13 is attempting to deal on a quote that we have actually then send trade instructions on those indicative quotes for previously sent to him. 14 14 15 consideration by us, to determine whether we can accept or 15 We will check at what point did we send that quote ID to him and whether there have been any subsequent quotes 16 reject those trade requests. 17 The -- a number of checks will form part of this since then; i.e. is he dealing on a stale quote, not the 17 decision, that are not all related to DTA. But one of the 18 18 latest available quote? checks could be DTA. And then if it is on a valid quote ID, we would 19 19 still do a price check as well, to make sure that it is 20 As I highlighted before, the delayed acceptance --20 the delayed trade acceptance configuration is only within the parameters specified by the system. 21 21 applicable to a small subset of targeted clients who trade Q. So if a DTA is applied, you say that after 22 22 in a latency-sensitive manner and it is a defensive a specified period of time, Deutsche Bank decides whether or 23 23 mechanism against it. 24 24 not to accept the trade on the basis of where the most up to

25

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The delayed trade acceptance piece would, after

date client price is; correct?

1	A. Sorry, can you say that again?	1	the absence of delayed trade acceptance, time still it
2	Q. Can you read it back, please?	2	still takes time to have a negotiation between the liquidity
3	(Record read.)	3	provider and the client. So we are sending indicative
4	MR. GENSER: Object to form.	4	quotes to the client. That takes time. The client needs to
5	A. Yes, I said the trade acceptance module will	5	make a trade decision on whether to send an instruction.
6	then make a recommendation to accept or reject the trade.	6	That takes time. The client then sends that instruction
7	BY MS. LAWRENCE:	7	over to Deutsche Bank and that takes time.
8	Q. By using what price comparison?	8	And so even in the absence of delayed trade
9	MR. GENSER: Objection, asked and answered.	9	acceptance, there is the need to check whether the prices
10	A. By comparing the rate at which the client is	10	are still accurate, because time has elapsed.
11	requesting to deal, versus the current rate that we are	11	BY MS. LAWRENCE:
12	that is valid for the client at that point in time.	12	Q. Okay. So are you comparing it to the most
13	BY MS. LAWRENCE:	13	updated price at the time you have completed your checks?
14	Q. The current rate that you yourself just said,	14	MR. GENSER: Object to form. Vague.
15	is that, in your opinion, the actual rate?	15	A. So without DTA, we would compare the incoming
16	MR. GENSER: Objection to form. In particular, to	16	trade request to the current client price, at the time of
17	the extent you are seeking an opinion, Mr. Oomen is not	17	the trade acceptance decision. Without DTA, there is no
18	being proffered as an expert witness.	18	additional pause before we make that decision.
19	A. I would say it's the it's the most accurate	19	BY MS. LAWRENCE:
20	assessment that we can make of where a fair price of	20	Q. So that decision is made after the checks are
21	liquidity is at that point in time.	21	run; correct?
22	BY MS. LAWRENCE:	22	MR. GENSER: Objection, misstates the testimony.
23	Q. Wouldn't the most accurate assessment be	23	Asked and answered.
24	a historical price?	24	A. We first before we can even contemplate
25	A. No.	25	a trade acceptance decision, we need to understand whether
23		23	•
	153		155
1		1	the trade request that the client sends in is a valid trade
1 2	Q. And why is that?	1 2	the trade request that the client sends in is a valid trade request.
2	Q. And why is that? A. Well, there's nearly an infinite amount of	1 2 3	request.
2	Q. And why is that?  A. Well, there's nearly an infinite amount of historical prices. None of them are I mean, a historical	2	request. BY MS. LAWRENCE:
2 3 4	Q. And why is that?  A. Well, there's nearly an infinite amount of historical prices. None of them are I mean, a historical price can be sorry. I just don't a historical price	2 3 4	request.  BY MS. LAWRENCE:  Q. And after you do that, you do a price check;
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Let's mark -- I am short of copies on this one, 1 to "very first". A. Sorry. When you say "the very first check", and I apologize for that -- as exhibit 57, a document 2 3 it suggests that you have in mind other checks to happen bearing Bates number DB-Axiom\_00401103. subsequently. So I guess by that argument, it cannot be (Exhibit 57 marked for identification.) 4 the price that is used in the trade acceptance final MR. GENSER: You just gave me one copy. Do you decision. 6 6 have any others? BY MS. LAWRENCE: 7 7 MS. LAWRENCE: I just told you. I am 8 Q. Okay. The first or the only check; is that unfortunately short on copies on that one. 9 9 better? MR. GENSER: Okay. I just --A. So if no DTA is applied, there will still be MS. LAWRENCE: That is the only one I think I am 10 10 a price check, and that compares, subject to other checks 11 11 short on, and I truly do apologize. passing, the quote ID and the rate contained in that trade 12 MR. GENSER: That is okay. We can share. 12 13 request, compared to the current rate at the point of the 13 MS. LAWRENCE: We realized that, some time after 14 the power outage. She is going to look and maybe we can trade acceptance. 14 15 Q. And if a DTA -- I am sorry. 15 find another one. 16 A. And at the trade acceptance decision, there A. This is printed out of the U.S.? I mean, the 16 17 is, I guess -- maybe this is what you are referring to. 17 date would be January 11 or 1st November? There is a threshold parameter set, which is described here BY MS. LAWRENCE: 18 18 in this document, which would be, I guess, almost a -- well, 19 Q. So my understanding is that these are U.S. --19 it would be a scenario where we could shortcut the process A. Okay. So in January? 20 20 21 and respond quicker than we otherwise would, on the basis of 21 Q. That is correct. 22 the price check done when the trade request is coming into 22 And some of them are mathematically impossible; you know, like a 1/31 or something. That is what I base 23 the bank. 23 24 Q. Irrespective of that document or thresholds --24 that on. 25 25 strike what I just started asking. A. Okay. 161 163 You referred to this document, which is about MR. GENSER: I just want to understand. There's 1 1 2 the DTA module. So is that price check you were just two things that you handed me. It is all the same exhibit? 3 referring to, part of the DTA module or in the absence of 3 MS. LAWRENCE: They are all the same exhibit. 4 the DTA module? 4 They are sequential Bates pages. 5 5 A. I believe that check happens, regardless. MR. GENSER: Okay. So it is going from 103 Q. Okay. 6 through 112? A. And then there is an optional DTA process. 7 MS. LAWRENCE: That's correct. 7 8 Q. Okay. 8 A. Yes, go ahead. 9 So there's the point of the trade request and 9 BY MS. LAWRENCE: then, absent the DTA, there is a trade decision. And you Q. Do you recognize the e-mail and the attachment 10 10 say that that's based on the current rate at the point of 11 11 before you? 12 the trade acceptance. That is the price check that occurs 12 A. I don't have a recollection of this. 13 there; correct? 13 Q. The e-mail side -- generally what type of MR. GENSER: Object to form. document is the attached document? 14 14 A. Yes, broadly, I think that's correct. 15 15 A. So by looking at the document, this looks like -- to be written by Henrik Muer who is a quant in 16 BY MS. LAWRENCE: 16 17 Q. Okay. And then if a DTA is applied, there is 17 the -- sorry so I don't ... 18 another point? 18 He has basically modified an existing document to 19 reflect the discussions we have had, as I can see from the A. Not another point. There is just a different 19 body of the e-mail. So I am assuming he is not the author 20 point. 20 Q. Fair enough; there is a different point. And of this, but has edited it in some sense. 21 21 a price check is done at that point, based upon the current This was in 2011, at some point, probably January, 22 22 rate at that point; correct? 23 which is about one and a half years before the Rapid 23 A. Yes. go-live. So I am assuming that this was the very early 24 24 25 stages of starting to think about the design of Rapid. Q. Okay.

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1	Q. And the questions best answered by somebody	1	A. Last look, in one way or the other, is part of
2	else included:	2	any OTC market.
3	"What is the logic of your last look	3	Q. But at the time, you worked in the FX market;
4	algorithm"	4	correct?
5	A. That's right. Well, sorry. Yes, okay, if you	5	MR. GENSER: Objection, argumentative.
6	write that here, yes.	6	A. At the time, I worked in FX. I don't think
7	MR. GENSER: I will just note for the record: you	7	that is related to your question, in that case.
8	only read half of that sentence, to the extent you are	8	BY MS. LAWRENCE:
9	reading from the document.	9	Q. Were junior salespeople familiar with the
10	BY MS. LAWRENCE:	10	methodology behind delayed trade acceptance on Autobahn or
11	Q. So based upon this e-mail, that wasn't	11	on Rapid?
12	something that salespeople could comfortably or junior	12	MR. GENSER: Objection, asked and answered. Lack
13	salespeople could comfortably answer?	13	of foundation.
14	A. That was our assessment, yes.	14	A. I would expect them to have some basic high
15	And by the way, that wasn't necessarily just our	15	level understanding of the process. But that doesn't mean
16	assessment. That would have also been the assessment of the	16	that they will be able to answer any client queries on that
17	junior salespersons.	17	topic.
18	Q. How do you know that?	18	BY MS. LAWRENCE:
19	A. So I think the background to this is that	19	Q. What does an FMR meeting mean to you?
20	sales were getting into, sort of, over time, in the	20	A. I don't recall. Perhaps it is an industry
21	evolution that I described before, the discussions were	21	body. I don't know. I don't know.
22	becoming more technical over time as to the platform and the	22	Q. Do you know John Estrada?
23	execution style of traders is becoming more technical.	23	A. Yes, I know John Estrada.
24	Junior salespeople have a variety of functions,	24	Q. Did John Estrada work at Credit Suisse?
25	and don't always specialize, even in FX spots specifically,	25	A. Yes.
	249		251
1	certainly not in electronic spots exclusively. And so they	1	Q. And what was his position, or what is his
2	wouldn't always be aware of all the intricacies of the	2	current position at Credit Suisse?
3	trading platform.	3	A. Well, I believe he is in a similar role to
4	And so they can answer high level questions, but	4	mine. I don't know his exact responsibilities, but I think
5	when they end up in conversations where clients are asking	5	he is well, I believe he is head of E-trading or
6	them a detailed question, there have been instances where	6	a similar role.
7	they escalate that to their manager and say: "I am ending up	7	Q. Do you communicate, or have you communicated,
8	in conversations where I don't necessarily know the details.	8	with individuals in similar roles as yours at other banks?
9	What should I do?"	9	MR. GENSER: Objection, vague.
10	And this was kind of an effort to give guidance to	10	A. So to give you an example. The Market Maker
11	salespeople to say: "If you don't know the answer to	11	Advisory Committee gathers a number of trading heads from
12	a question, say you don't know the question and you will	12	a number of banks. And so that would be one example where
13	follow up."	13	I would sit in the same room with my peers and interact,
14	And this was basically to provide a framework or	14	communicate and discuss topics with them.
15	a guidance for sales; a cheat sheet, if you like, to	15	BY MS. LAWRENCE:
16	understand: "These are the topics that I am expected to	16	Q. Do you recall having specific conversations
17	answer and these are the topics that I am expected to defer	17	with Mr. Estrada in 2014 about DTA or last look?
18	to more senior people within the organization."	18	MR. GENSER: Object to form.
19	And from memory, this was not this was an	19	BY MS. LAWRENCE:
20	effort that was conducted across the global markets; so	20	Q. Or both?
21	this wasn't FX-specific.	21	MR. GENSER: Object to form.
22	Q. Your examples of the categories include, in	22	A. I don't recall specifically. I do recall that
23	your definition, as we just discussed, it does include last	23	John, on one or a few occasions, has asked me to get
24	look algorithm, though, which is specific to FX in this	24	involved in some forum or discussion on these topics.
25	instance; correct?	25	To the best of my knowledge, I have never accepted



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